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July 29, 2019

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

RE: Duke Energy Progress, LLC – Monthly Power Plant Performance Report
Docket No. 2006-224-E

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of June 2019.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Mr. Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress
Base Load Power Plant Performance Review Plan

Period: June, 2019

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	None					

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Lee Energy Complex

No Outages at Baseload Units During the Month.

Mayo Station

No Outages at Baseload Units During the Month.

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
10	6/3/2019 2:03:00 AM To 6/3/2019 6:09:00 AM	Unsch	5079	Other Gas Turbine Combustor Problems	Lean blowout.	
10	6/3/2019 10:32:00 PM To 6/3/2019 11:04:00 PM	Unsch	4740	Emergency Generator Trip Devices	Unit tripped on reverse power.	
ST5	6/3/2019 7:03:00 AM To 6/4/2019 12:20:00 AM	Unsch	4293	Turbine Hydraulic System Pipes And Valves	Hydraulic oil leak on Main Steam Stop Valve.	

Roxboro Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
2	5/13/2019 7:00:00 AM To 6/1/2019 1:00:00 PM	Sch	0360	Burners	Burner Repairs.	
2	6/3/2019 7:00:00 AM To 6/5/2019 12:00:00 PM	Sch	4280	Turbine Lube Oil Pumps	Main Turbine Turning Gear Oil Pump Replacement.	
2	6/23/2019 4:01:00 AM To 6/23/2019 6:06:00 AM	Unsch	4302	Turbine Trip Devices (including Instruments)	Unit Trip While Performing Weekly Turbine Thrust Wear Test.	
2	6/26/2019 1:24:00 AM To 6/30/2019 5:00:00 PM	Sch	1512	Flue Gas Expansion Joints	Economizer Expansion Joint Repairs.	
3	6/2/2019 7:00:00 AM To 6/8/2019 2:00:00 PM	Sch	8816	Scr Plugging	Cleaning SCR and Economizer Dust Hoppers.	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Sutton Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1B	6/7/2019 11:41:00 PM To 6/8/2019 12:53:00 PM	Unsch	5075	Blade Path Temperature Spread	Tripped to high blade path temperature. The causes of the high spread is unknown.	
1B	6/8/2019 1:28:00 PM To 6/8/2019 7:05:00 PM	Unsch	5075	Blade Path Temperature Spread	Tripped to high blade path temperature. The causes of the high spread is unknown.	
1B	6/8/2019 8:31:00 PM To 6/9/2019 11:31:00 AM	Unsch	5075	Blade Path Temperature Spread	Tripped to high blade path temperature. The causes of the high spread is unknown.	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

June 2019
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	720		720	
(C) Net Gen (mWh) and Capacity Factor (%)	645,977	95.65	668,038	99.55
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	5,838	0.86	4,541	0.68
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	23,545	3.49	-1,539	-0.23
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	675,360	100.00%	671,040	100.00%
(K) Equivalent Availability (%)		94.53		99.24
(L) Output Factor (%)		95.65		99.55
(M) Heat Rate (BTU/NkWh)		10,533		10,660

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

June 2019

Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	964	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	691,860	99.68
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	2,220	0.32
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	694,080	100.00%
(K) Equivalent Availability (%)		100.00
(L) Output Factor (%)		99.68
(M) Heat Rate (BTU/NkWh)		10,465

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

June 2019
Robinson Nuclear Station

	Unit 2	
(A) MDC (mW)	741	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	552,883	103.63
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	1,096	0.21
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-20,459	-3.84
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	533,520	100.00%
(K) Equivalent Availability (%)		99.80
(L) Output Factor (%)		103.63
(M) Heat Rate (BTU/NkWh)		10,360

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	720	720	720	720	720
(C) Net Generation (mWh)	107,454	107,058	108,437	236,630	559,579
(D) Capacity Factor (%)	66.33	65.50	66.06	86.72	73.39
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	39,600	41,040	41,760	720	123,120
(H) Scheduled Derates: percent of Period Hrs	24.44	25.11	25.44	0.26	16.15
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	14,946	15,342	13,963	35,530	79,781
(N) Economic Dispatch: percent of Period Hrs	9.23	9.39	8.51	13.02	10.46
(O) Net mWh Possible in Period	162,000	163,440	164,160	272,880	762,480
(P) Equivalent Availability (%)	75.56	74.89	74.56	99.74	83.85
(Q) Output Factor (%)	66.33	65.50	66.06	86.72	73.39
(R) Heat Rate (BTU/NkWh)	9,643	9,727	9,678	4,199	7,364

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	194	194	182	570
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	101,330	102,674	120,728	324,732
(D) Capacity Factor (%)	72.54	73.51	92.13	79.13
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	28,800	29,520	9,360	67,680
(H) Scheduled Derates: percent of Period Hrs	20.62	21.13	7.14	16.49
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	9,550	7,486	952	17,988
(N) Economic Dispatch: percent of Period Hrs	6.84	5.36	0.73	4.38
(O) Net mWh Possible in Period	139,680	139,680	131,040	410,400
(P) Equivalent Availability (%)	79.38	78.87	92.86	83.51
(Q) Output Factor (%)	73.50	73.51	92.13	79.48
(R) Heat Rate (BTU/NkWh)	11,922	11,591	0	7,385

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	105,211	103,830	146,842	355,883
(D) Capacity Factor (%)	67.65	66.76	82.24	72.69
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	30,240	29,330	0	59,570
(H) Scheduled Derates: percent of Period Hrs	19.44	18.86	0.00	12.17
(I) Net mWh Not Generated due to Full Forced Outages	0	1,001	4,286	5,287
(J) Forced Outages: percent of Period Hrs	0.00	0.64	2.40	1.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	20,069	21,359	27,432	68,860
(N) Economic Dispatch: percent of Period Hrs	12.90	13.73	15.36	14.06
(O) Net mWh Possible in Period	155,520	155,520	178,560	489,600
(P) Equivalent Availability (%)	80.56	80.50	97.60	86.75
(Q) Output Factor (%)	76.87	76.59	94.85	83.30
(R) Heat Rate (BTU/NkWh)	11,746	11,719	0	6,892

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
June 2019

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	116,305	111,853	152,744	380,902
(D) Capacity Factor (%)	72.11	69.35	78.28	73.58
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	38,880	36,368	3,600	78,848
(H) Scheduled Derates: percent of Period Hrs	24.11	22.55	1.85	15.23
(I) Net mWh Not Generated due to Full Forced Outages	0	7,575	0	7,575
(J) Forced Outages: percent of Period Hrs	0.00	4.70	0.00	1.46
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	5,096	5,096
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.61	0.98
(M) Net mWh Not Generated due to Economic Dispatch	6,095	5,484	33,680	45,259
(N) Economic Dispatch: percent of Period Hrs	3.78	3.40	17.26	8.74
(O) Net mWh Possible in Period	161,280	161,280	195,120	517,680
(P) Equivalent Availability (%)	75.89	72.75	95.54	82.32
(Q) Output Factor (%)	72.55	73.69	78.28	75.09
(R) Heat Rate (BTU/NkWh)	12,096	11,985	0	7,213

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
June 2019

	Mayo Station Unit 1
(A) MDC (mW)	746
(B) Period Hrs	720
(C) Net Generation (mWh)	226,335
(D) Net mWh Possible in Period	537,120
(E) Equivalent Availability (%)	91.28
(F) Output Factor (%)	42.14
(G) Capacity Factor (%)	42.14

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
June 2019

	Roxboro Station		
	Unit 2	**Unit 3**	**Unit 4**
(A) MDC (mW)	673	698	711
(B) Period Hrs	720	720	720
(C) Net Generation (mWh)	117,688	125,910	181,615
(D) Net mWh Possible in Period	484,560	502,560	511,920
(E) Equivalent Availability (%)	72.26	78.57	98.17
(F) Output Factor (%)	45.97	51.97	60.76
(G) Capacity Factor (%)	24.29	25.05	35.48

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

July 2018 - June 2019
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,622,853	92.77	6,673,407	81.74
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	716,056	8.77
* (E) Net mWh Not Gen due to Partial Scheduled Outages	34,837	0.42	98,055	1.20
(F) Net mWh Not Gen due to Full Forced Outages	626,240	7.62	366,339	4.49
* (G) Net mWh Not Gen due to Partial Forced Outages	-67,050	-0.81	310,463	3.80
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		93.72		84.78
(L) Output Factor (%)		100.42		94.23
(M) Heat Rate (BTU/NkWh)		10,422		10,790

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

July 2018 - June 2019
Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	964	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	8,615,066	103.75
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	732	0.01
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-312,502	-3.76
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,303,296	100.00%
(K) Equivalent Availability (%)		99.99
(L) Output Factor (%)		103.74
(M) Heat Rate (BTU/NkWh)		10,219

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

July 2018 - June 2019
Robinson Nuclear Station

	Unit 2	
(A) MDC (mW)	741	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	5,447,633	83.92
(D) Net mWh Not Gen due to Full Schedule Outages	1,167,520	17.99
* (E) Net mWh Not Gen due to Partial Scheduled Outages	87,300	1.34
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-211,293	-3.25
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	6,491,160	100.00%
(K) Equivalent Availability (%)		80.80
(L) Output Factor (%)		102.33
(M) Heat Rate (BTU/NkWh)		10,374

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
July, 2018 through June, 2019

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,405,354	1,402,008	1,424,041	2,812,159	7,043,562
(D) Capacity Factor (%)	71.30	70.51	71.30	84.70	75.93
(E) Net mWh Not Generated due to Full Scheduled Outages	111,997	126,753	133,053	201,382	573,185
(F) Scheduled Outages: percent of Period Hrs	5.68	6.37	6.66	6.07	6.18
(G) Net mWh Not Generated due to Partial Scheduled Outages	254,994	263,645	267,808	48,940	835,387
(H) Scheduled Derates: percent of Period Hrs	12.94	13.26	13.41	1.47	9.01
(I) Net mWh Not Generated due to Full Forced Outages	37,268	37,561	36,096	61,499	172,424
(J) Forced Outages: percent of Period Hrs	1.89	1.89	1.81	1.85	1.86
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	4,605	4,605
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.14	0.05
(M) Net mWh Not Generated due to Economic Dispatch	161,387	158,553	136,282	191,455	647,677
(N) Economic Dispatch: percent of Period Hrs	8.19	7.97	6.82	5.77	6.98
(O) Net mWh Possible in Period	1,971,000	1,988,520	1,997,280	3,320,040	9,276,840
(P) Equivalent Availability (%)	79.49	78.48	78.12	90.47	82.91
(Q) Output Factor (%)	78.64	77.06	78.00	92.13	83.02
(R) Heat Rate (BTU/NkWh)	8,995	9,082	8,995	4,594	7,255

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
July, 2018 through June, 2019

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	192	192	179	562
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,241,061	1,236,047	1,394,508	3,871,616
(D) Capacity Factor (%)	73.99	73.69	89.20	78.72
(E) Net mWh Not Generated due to Full Scheduled Outages	103,816	93,362	60,727	257,904
(F) Scheduled Outages: percent of Period Hrs	6.19	5.57	3.88	5.24
(G) Net mWh Not Generated due to Partial Scheduled Outages	184,211	188,680	72,171	445,061
(H) Scheduled Derates: percent of Period Hrs	10.98	11.25	4.62	9.05
(I) Net mWh Not Generated due to Full Forced Outages	15,578	22,448	5,014	43,040
(J) Forced Outages: percent of Period Hrs	0.93	1.34	0.32	0.88
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	12,850	12,850
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.82	0.26
(M) Net mWh Not Generated due to Economic Dispatch	132,690	136,818	18,130	287,639
(N) Economic Dispatch: percent of Period Hrs	7.91	8.16	1.16	5.85
(O) Net mWh Possible in Period	1,677,355	1,677,355	1,563,401	4,918,111
(P) Equivalent Availability (%)	81.93	81.87	90.42	84.57
(Q) Output Factor (%)	80.05	79.98	93.54	84.41
(R) Heat Rate (BTU/NkWh)	11,364	11,200	0	7,218

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
July, 2018 through June, 2019

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,252,254	1,255,676	1,627,047	4,134,977
(D) Capacity Factor (%)	66.18	66.36	74.89	69.42
(E) Net mWh Not Generated due to Full Scheduled Outages	325,051	342,004	423,113	1,090,168
(F) Scheduled Outages: percent of Period Hrs	17.18	18.07	19.48	18.30
(G) Net mWh Not Generated due to Partial Scheduled Outages	175,607	168,381	0	343,988
(H) Scheduled Derates: percent of Period Hrs	9.28	8.90	0.00	5.77
(I) Net mWh Not Generated due to Full Forced Outages	0	1,001	4,286	5,287
(J) Forced Outages: percent of Period Hrs	0.00	0.05	0.20	0.09
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,144	1,144
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.05	0.02
(M) Net mWh Not Generated due to Economic Dispatch	139,248	125,098	116,890	381,236
(N) Economic Dispatch: percent of Period Hrs	7.36	6.61	5.38	6.40
(O) Net mWh Possible in Period	1,892,160	1,892,160	2,172,480	5,956,800
(P) Equivalent Availability (%)	73.54	72.97	80.27	75.82
(Q) Output Factor (%)	82.80	83.13	94.34	87.10
(R) Heat Rate (BTU/NkWh)	11,333	11,254	0	6,850

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
July, 2018 through June, 2019

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,222,604	1,194,768	1,329,864	3,747,236
(D) Capacity Factor (%)	62.31	60.89	56.02	59.49
(E) Net mWh Not Generated due to Full Scheduled Outages	109,319	153,485	101,458	364,262
(F) Scheduled Outages: percent of Period Hrs	5.57	7.82	4.27	5.78
(G) Net mWh Not Generated due to Partial Scheduled Outages	241,737	224,630	19,388	485,755
(H) Scheduled Derates: percent of Period Hrs	12.32	11.45	0.82	7.71
(I) Net mWh Not Generated due to Full Forced Outages	134,639	182,687	569,475	886,801
(J) Forced Outages: percent of Period Hrs	6.86	9.31	23.99	14.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	12,974	12,974
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.55	0.21
(M) Net mWh Not Generated due to Economic Dispatch	253,941	206,670	340,801	801,412
(N) Economic Dispatch: percent of Period Hrs	12.94	10.53	14.36	12.72
(O) Net mWh Possible in Period	1,962,240	1,962,240	2,373,960	6,298,440
(P) Equivalent Availability (%)	75.25	71.42	70.37	72.22
(Q) Output Factor (%)	77.55	77.89	78.37	77.95
(R) Heat Rate (BTU/NkWh)	11,398	11,392	0	7,351

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
July, 2018 through June, 2019

Mayo Station

Units	Unit 1
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,216,522
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	68.52
(F) Output Factor (%)	37.95
(G) Capacity Factor (%)	18.62

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
July, 2018 through June, 2019

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,201,791	1,445,114	2,187,845
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	77.87	59.48	72.93
(F) Output Factor (%)	48.97	53.14	57.78
(G) Capacity Factor (%)	20.38	23.63	35.13

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
June, 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		
		Scheduled	Unscheduled	Total
Brunswick 1	**938**	**0.00**	**0.00**	**0.00**
Brunswick 2	**932**	**0.00**	**0.00**	**0.00**
Harris 1	**964**	**0.00**	**0.00**	**0.00**
Robinson 2	**741**	**0.00**	**0.00**	**0.00**

Duke Energy Progress
Outages for 100 mW or Larger Units
June 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	0.00	0.00	0.00
Asheville CT 4	185	0.00	0.00	0.00
Darlington CT 12	133	0.00	0.00	0.00
Darlington CT 13	133	0.00	0.00	0.00
Lee Energy Complex CC 1A	225	0.00	0.00	0.00
Lee Energy Complex CC 1B	227	0.00	0.00	0.00
Lee Energy Complex CC 1C	228	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	0.00	0.00	0.00
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	0.00	0.00	0.00
Richmond County CT 3	185	0.00	0.00	0.00
Richmond County CT 4	186	0.00	0.00	0.00
Richmond County CT 6	187	0.00	0.00	0.00
Richmond County CC 7	194	0.00	0.00	0.00
Richmond County CC 8	194	0.00	0.00	0.00
Richmond County CC ST4	182	0.00	0.00	0.00
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	0.00	4.63	4.63
Richmond County CC ST5	248	0.00	17.28	17.28

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
June 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	7.00	7.00
Roxboro Steam 2	673	177.60	2.08	179.68
Roxboro Steam 3	698	151.00	0.00	151.00
Roxboro Steam 4	711	0.00	0.00	0.00
Sutton Energy Complex CC 1A	224	0.00	0.00	0.00
Sutton Energy Complex CC 1B	224	0.00	33.82	33.82
Sutton Energy Complex CC ST1	271	0.00	0.00	0.00
Wayne County CT 10	192	261.50	176.00	437.50
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	0.00	0.00	0.00
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.